



FUSION JOINING DEVICE FOR PLASTIC TUBES

FIELD OF THE INVENTION

The present invention relates to a fusion joining device
5 for plastic tubes that heats the joint portion of plastic tubes
for fusion joining the joint portion. Here, the term "plastic
tubes" also refers to tubes which comprise a tube made of
plastic, such as a plastic joint body and a plastic heat
resistant cylinder.

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BACKGROUND

With conventional fusion joining devices for plastic tubes,
a heat fusion joinable plastic tube is loaded on the peripheral
surface in the vicinity of the joint portion of plastic tubes,
15 and the peripheral surface of this heat fusion joinable plastic
tube is further tightly covered with a heat resistant cylinder,
the heater being tightly contacted with the peripheral surface
of this heat resistant cylinder such that the heat fusion
joinable plastic tube is fusion joined to the peripheral
20 surface in the vicinity of the joint portion by the conduction
heat of the heater that is transferred through the heat
resistant cylinder, in order to fusion join the plastic tubes
to each other. The heater body is made of a heat conductive
and insulating material, being formed in the shape of a
25 semi-cylinder, and a heating element, such as a Nichrome wire,
is disposed inside of the heater body. (Refer to Japanese
Laid-Open Publication No. 8-174675, for example.)

However, with such a conventional fusion joining device for
plastic tubes, which is based on the art as mentioned in
30 Japanese Laid-Open Publication No. 8-174675, the disposal of
a heating element, such as a Nichrome wire, in the heater body
has increased the thickness of the heater, resulting in the
entire device being a large-sized one, and the complicated
configuration of the heater has been an obstacle to the
35 reduction in cost.

Developed in consideration of such problems of the prior

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sub. spec.
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